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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/496,086	02/01/2000	Raja Chatterjee	99,028	5705
21253	7590	04/26/2005	EXAMINER	
CHARLES G. CALL 68 HORSE POND ROAD WEST YARMOUTH, MA 02673-2516			SMITH, PETER J	
			ART UNIT	PAPER NUMBER
			2176	

DATE MAILED: 04/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/496,086	CHATTERJEE ET AL.	
	Examiner	Art Unit	
	Peter J Smith	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 31 January 2005.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-17 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____.
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____.

DETAILED ACTION

1. This action is responsive to communications: amendment filed 1/31/2005.
2. Claims 1-17 are pending in the case. Claims 1, 8, and 10 are independent claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-2, 4-8, and 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al. (hereinafter “Nelson”), US 6,243,713 B1 filed 8/24/1998.**

Regarding independent claim 1, Nelson teaches analyzing a multimedia document to identify at least one markup tag containing a reference to a given one of resources in fig. 1-2, fig. 4, col. 2 lines 19-37, col. 5 lines 11-51, and col. 8 line 1 – col. 9 line 7. Nelson shows in the col. 5 lines 39-51 that the multimedia document can be an HTML document and HTML documents generally represent Web pages, thus the scope of Nelson includes multimedia Web page documents. Nelson also specifically indicates in col. 5 lines 31-38 and col. 8 lines 26-27 that the multimedia document may be a downloaded Web page. Nelson teaches selecting and executing a media processing program for analyzing the content of the multimedia data supplied by the given one of the resources to generate metadata describing the content in fig. 2, fig. 4-7, and col. 9 line 9 – col. 14 line 55. The cited text section described how Nelson generates metadata for each of the types of multimedia content components. Nelson teaches formatting the metadata

into character-based tokens in fig. 6-8 and col. 3 lines 19-59. The tokens for the different multimedia component types are normalized so that tokens can be combined into a single index as is shown in fig. 8. Nelson teaches indexing the multimedia document into a unified multimedia index to equally represent in a normalized fashion all of the tokens of the multimedia document in fig. 8-9 and col. 14 line 56 – col. 15 line 58. Each of the tokens is linked to the document from which it was extracted through use of a unique document ID referencing that document.

Nelson does not teach combining the Web page and the generated annotation (Nelson calls it a token) to form an enhanced Web page. As stated earlier, Nelson does teach that all of the tokens extracted from a particular document are linked to that document through use of a unique document ID in col. 15 lines 24-36. Therefore, tokens of text, image, video, audio, and other data are all linked together to represent a single document through use of the unique document ID. Thus, this is essentially the same in function, but only similar in form to the claimed limitation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Nelson to have created the claimed invention. It would have been obvious and desirable to have modified Nelson to have inserted the token representations of image, video, audio, and other multimedia components into the text of the multimedia document so that the text did not have to be processed, thus allowing the extraction software design to be simpler.

Regarding dependent claim 2, Nelson teaches determining the particular data type of the multimedia data supplied by the given resource and selecting a processing program for

analyzing multimedia data formatted in accordance with the particular data type in fig. 2, fig. 4, and col. 3 lines 21-27.

Regarding dependent claim 4, Nelson teaches acquiring additional metadata which describes the multimedia data supplied by the given one of the resources, and including the additional metadata in the character-based text annotation in fig. 2, fig. 4-7, and col. 9 line 9 – col. 14 line 55. Nelson teaches that the position data may be used in creating the tokens, thus Nelson teaches that the additional metadata may be supplied by a source other than the content of the multimedia data.

Regarding dependent claim 5, Nelson teaches wherein at least some of the additional metadata includes information obtained from the one markup tag in fig. 2, fig. 4-7, and col. 9 line 9 – col. 14 line 55. Nelson indicates in col. 9 line 9 – col. 10 line 37 that the tags may be used to identify a position and a name for the identified multimedia component.

Regarding dependent claim 6, Nelson teaches acquiring additional metadata which describes the multimedia data supplied by the given one of the resources, and including the additional metadata in the character-based text annotation in fig. 2, fig. 4-7, and col. 9 line 9 – col. 14 line 55. Nelson does not specifically teach wherein the given resource is accessed through the operating system of the computer which provides the given resource and wherein at least some of the additional metadata includes information obtained from the operating system.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Nelson to have created the claimed invention. Nelson teaches the multimedia content components may be referenced from the multimedia document and thus a valid reference would be a multimedia content component from the operating system. It would

have been obvious and desirable to have obtained a referenced resource from the operating system and used metadata from the operating system to describe the resource so that multimedia components could have taken advantage of the local computer's operating system resources.

Regarding dependent claim 7, Nelson teaches acquiring additional metadata which describes the multimedia data supplied by the given one of the resources, and including the additional metadata in the character-based text annotation in fig. 2, fig. 4-7, and col. 9 line 9 – col. 14 line 55. Nelson teaches in col. 5 lines 39-51 that the multimedia component may be referenced by tags in the multimedia document. If the reference indicates a resource located on the Internet, Nelson is then going to obtain additional information about the resource via the Internet in forming the characterization token.

Regarding independent claim 8, Nelson teaches a parser for identifying markup tags in a Web page in fig. 1-2, fig. 4, col. 2 lines 19-37, col. 5 lines 11-51, and col. 8 line 1 – col. 9 line 7. Nelson shows in the col. 5 lines 39-51 that the multimedia document can be an HTML document and HTML documents generally represent Web pages, thus the scope of Nelson includes multimedia Web page documents. Nelson also specifically indicates in col. 5 lines 31-38 and col. 8 lines 26-27 that the multimedia document may be a downloaded Web page. Nelson teaches analyzing the content of multimedia data identified by markup tags to generate metadata describing the multimedia data in fig. 2, fig. 4-7, and col. 9 line 9 – col. 14 line 55. The cited text section described how Nelson generates metadata for each of the types of multimedia content components.

Nelson teaches translating the metadata into a character-based text annotation describing the multimedia data in fig. 6-8 and col. 3 lines 19-59. Nelson teaches formatting the metadata

into character-based tokens in fig. 6-8 and col. 3 lines 19-59. The tokens for the different multimedia component types are normalized so that tokens can be combined into a single index as is shown in fig. 8. Nelson teaches indexing the multimedia document into a unified multimedia index to equally represent in a normalized fashion all of the tokens of the multimedia document in fig. 8-9 and col. 14 line 56 – col. 15 line 58. Each of the tokens is linked to the document from which it was extracted through use of a unique document ID referencing that document.

Nelson does not teach storing the combination of a copy of the Web page and the annotation to form an enhanced Web page suitable for processing by text-based indexing and searching facilities. As stated earlier, Nelson does teach that all of the tokens extracted from a particular document are linked to that document through use of a unique document ID in col. 15 lines 24-36. Therefore, tokens of text, image, video, audio, and other data are all linked together to represent a single document through use of the unique document ID. Thus, this is essentially the same in function, but only similar in form to the claimed limitation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Nelson to have created the claimed invention. It would have been obvious and desirable to have modified Nelson to have inserted the token representations of image, video, audio, and other multimedia components into the text of the multimedia document so that the text did not have to be processed, thus allowing the extraction software design to be simpler.

Regarding independent claim 10, Nelson teaches identifying one or more markup tags in a Web page which respectively identify one or more external resources which provide multimedia data in fig. 1-2, fig. 4, col. 2 lines 19-37, col. 5 lines 11-51, and col. 8 line 1 – col. 9

line 7. Nelson shows in the col. 5 lines 39-51 that the multimedia document can be an HTML document and HTML documents generally represent Web pages, thus the scope of Nelson includes multimedia Web page documents. Nelson also specifically indicates in col. 5 lines 31-38 and col. 8 lines 26-27 that the multimedia document may be a downloaded Web page. Nelson teaches generating metadata which describes the multimedia data in fig. 2, fig. 4-7; and col. 9 line 9 – col. 14 line 55. The cited text section described how Nelson generates metadata for each of the types of multimedia content components.

Nelson teaches translating the metadata into a character-based text annotation describing the multimedia data in fig. 6-8 and col. 3 lines 19-59. Nelson teaches formatting the metadata into character-based tokens in fig. 6-8 and col. 3 lines 19-59. The tokens for the different multimedia component types are normalized so that tokens can be combined into a single index as is shown in fig. 8. Nelson teaches indexing the multimedia document into a unified multimedia index to equally represent in a normalized fashion all of the tokens of the multimedia document in fig. 8-9 and col. 14 line 56 – col. 15 line 58. Each of the tokens is linked to the document from which it was extracted through use of a unique document ID referencing that document.

Nelson does not teach inserting the annotation into the Web page to form an enhanced Web page suitable for processing by a character-based text processing system. As stated earlier, Nelson does teach that all of the tokens extracted from a particular document are linked to that document through use of a unique document ID in col. 15 lines 24-36. Therefore, tokens of text, image, video, audio, and other data are all linked together to represent a single document through use of the unique document ID. Thus, this is essentially the same in function, but only similar in

form to the claimed limitation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Nelson to have created the claimed invention. It would have been obvious and desirable to have modified Nelson to have inserted the token representations of image, video, audio, and other multimedia components into the text of the multimedia document so that the text did not have to be processed, thus allowing the extraction software design to be simpler.

Regarding dependent claim 11, Nelson teaches first identifying markup tags in a Web page and extracting the uniform resource locator (URL) of one of the external resources from the at least selected ones of the markup tags in fig. 1-2, fig. 4-7, col. 2 lines 19-37, col. 5 lines 11-51, and col. 8 line 1 – col. 14 line 55. Nelson shows in the col. 5 lines 39-51 that the multimedia document can be an HTML document and HTML documents generally represent Web pages, thus the scope of Nelson includes multimedia Web page documents. Nelson also specifically indicates in col. 5 lines 31-38 and col. 8 lines 26-27 that the multimedia document may be a downloaded Web page. Nelson teaches in col. 5 lines 39-51 that the multimedia component may be referenced by tags in the multimedia document. The reference to a multimedia component in an HTML Web page is a URL.

Regarding dependent claim 12, Nelson teaches retrieving multimedia data from one or more external resources and analyzing the content of the multimedia data to extract the metadata therefrom in fig. 1-2, fig. 4-7, col. 2 lines 19-37, col. 5 lines 11-51, and col. 8 line 1 – col. 14 line 55. Nelson shows in the col. 5 lines 39-51 that the multimedia document can be an HTML document and HTML documents generally represent Web pages, thus the scope of Nelson includes multimedia Web page documents. Nelson also specifically indicates in col. 5 lines 31-

38 and col. 8 lines 26-27 that the multimedia document may be a downloaded Web page. Nelson teaches in col. 5 lines 39-51 that the multimedia component may be referenced by tags in the multimedia document. The reference is to an external resource from which the multimedia data is retrieved and the metadata extract therefrom.

Regarding dependent claim 13, Nelson teaches identifying the data type of the multimedia data from each of the resources and then selecting a processing routine for multimedia of the identified data type from each of the resources in fig. 2, fig. 4, and col. 3 lines 21-27.

Regarding dependent claim 14, Nelson teaches indexing the multimedia document into a unified multimedia index to equally represent in a normalized fashion all of the tokens of the multimedia document and provide access to the Web page in response to queries expressing one or more attributes expressed in the text annotation in fig. 8-9 and col. 14 line 56 – col. 15 line 58. Each of the tokens is linked to the document from which it was extracted through use of a unique document ID referencing that document.

Regarding dependent claim 15, Nelson teaches searching the content of the Web page in response to a search request to determine if attributes expressed in the search request are contained in the text annotation in fig. 11-16, col. 3 line 47 – col. 4 line 17, and col. 15 line 60 – col. 27 line 3.

Regarding dependent claim 16, Nelson teaches indexing the Web page to provide access to the Web page in response to queries expressing one or more attributes expressed in the text annotation in fig. 11-16, col. 3 line 47 – col. 4 line 17, and col. 15 line 60 – col. 27 line 3.

Regarding dependent claim 17, Nelson teaches searching the content of the Web page in response to a search request to determine if attributes expressed in the search request are contained in the text annotation in fig. 11-16, col. 3 line 47 – col. 4 line 17, and col. 15 line 60 – col. 27 line 3.

5. Claims 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al. (hereinafter “Nelson”), US 6,243,713 B1 filed 8/24/1998 in view of Mohan et al. (hereinafter “Mohan”), US 6,748,382 B1 filed 12/1/1999 with priority to provisional filed 1/28/1999.

Regarding dependent claim 3, Nelson does not teach generating a text data annotation expressed in accordance with the Extensible Markup Language. Mohan does teach generating a text data annotation expressed in accordance with the Extensible Markup Language in fig. 3 and col. 2 lines 16-28. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Mohan into Nelson to have created the claimed invention. It would have been obvious and desirable to have enhanced the tokens of Nelson with the XML based media asset management descriptions of Mohan to have ensured maximum interoperability as described by Mohan in col. 2 lines 27-28.

Regarding dependent claim 9, Nelson does not teach generating a text data annotation expressed in accordance with the Extensible Markup Language. Mohan does teach generating a text data annotation expressed in accordance with the Extensible Markup Language in fig. 3 and col. 2 lines 16-28. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have combined Mohan into Nelson to have created the claimed invention.

It would have been obvious and desirable to have enhanced the tokens of Nelson with the XML based media asset management descriptions of Mohan to have ensured maximum interoperability as described by Mohan in col. 2 lines 27-28.

Response to Arguments

6. Applicant's arguments filed 1/31/2005 have been fully considered but they are not persuasive. Regarding Applicant's arguments in pages 6 and 7 that it would not have been obvious to have modified Nelson to have created the claimed invention, the Examiner respectfully disagrees. Nelson parses the media content and generates tokens describing the media content and associates the tokens with the parent document as is described in fig. 8-9 and col. 14 line 56 – col. 15 line 58. The difference is that the tokens are maintained separately and have an associative link to the document from which they were created. The documents which Nelson parses and indexes can be HTML web documents. The HTML specification provides for meta-tag annotation of the document to provide existing popular Web search facilities with a way to automatically index such documents. Since Nelson teaches how to extract character-based annotation data from the multimedia components of the web page, the Examiner believes it would have been obvious to have recombined the extracted character data with the Web page using the HTML annotation meta-tags capability. Thus, the Examiner maintains the rejection of the claimed invention as being obvious over the teachings of Nelson.

Regarding Applicant's arguments in pages 7 and 8 that Nelson does not teach acquiring additional data to describe the media data from a source other than the content of the media data itself, the Examiner respectfully disagrees. Nelson teaches that the position data may be used in

creating the tokens, thus Nelson teaches that the additional metadata may be supplied by a source other than the content of the multimedia data. Furthermore in regard to claim 6, the Examiner believes it would have been advantageous to have acquired data through the operating system for components dependent on particular hardware configurations and thus believes Nelson would have been modified to specifically acquire such metadata. Thus, the Examiner maintains that Nelson provides sufficient teachings to enable one of ordinary skill in the art at the time of the invention to have created the invention as described in claims 4-7.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Smith whose telephone number is 571-272-4101. The examiner can normally be reached on Mondays-Fridays 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PJS
4/21/2005



JOSEPH FEILD
SUPERVISORY PATENT EXAMINER